

**STATE FOREST LAND
ENVIRONMENTAL CHECKLIST**

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov> under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

*Timber Sale Name: PUMA**Agreement #: 30-076008*
2. Name of applicant: Department of Natural Resources
3. Address and phone number of applicant and contact person:

Department of Natural Resources
South Puget Sound Regional Office
950 Farman Avenue North
Enumclaw, WA 98022-9282
(360)825-1631
Contact: Joe Brady
4. Date checklist prepared: 07/29/2004
5. Agency requesting checklist: Washington State Department of Natural Resources
6. Proposed timing or schedule (including phasing, if applicable):

a. *Auction Date: 01/25/2005*

b. *Planned contract end date (but may be extended): 10/31/2005*

c. *Phasing: None.*
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Timber Sale

a. *Site preparation:*None expected, but conditions will be evaluated at the conclusion of harvest.

b. *Regeneration Method:*

Unit 1 *HAND PLANT*01/01/200688 Acres

Unit 2 *HAND PLANT*01/01/200629 Acres

c. *Vegetation Management:*Vegetation competition will be assessed five years after planting. Treatment needs will be assessed using current vegetation management guidelines and control of competing brush within the sale area and along the roads will be done in accordance with the Forestry Handbook, dated July 1999.

d. *Thinning:*Pre-commercial Thinning (PCT) needs will be assessed within 15 years after planting.
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- Form Rev. July 3, 2003

Roads: After the completion of the timber sale contract, annual road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and road grading as needed to minimize erosion and ensure proper and efficient water drainage.

Rock Pits and/or Sale: The purchaser of this proposal will have the option of using 1000 cubic yards from the Cougar pit, which is immediately north of Unit 1. If more rock is needed, the existing DNR Sand Hill rock pit will be used, which will continue to be the source of surface rock for this area in the future.

Other: None.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ 303 (d) – listed water body in WAU: ☐ temp ☐ sediment ☐ completed TMDL (total maximum daily load):
☐ Landscape plan:
☐ Watershed analysis:
☐ Interdisciplinary team (ID Team) report:
☒ Road design plan: **dated 8/04/04***
☒ Wildlife report: **dated 8/23/04***
☐ Geotechnical report:
☒ Other specialist report(s): Division geologist Wendy Gerstel's slope stability assesment, **dated 6/21/04 and related email dated 8/31/04***
☐ Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
☒ Rock pit plan: **See Road Plan, dated 08/04/04***
☒ Other: **Forest Resources Plan and EIS, dated July, 1992; Final Habitat Conservation Plan and EIS, dated September, 1997; State Soil Survey, dated 1992; Road Maintenance and Abandonment Plan (RMAP) #R240027.***

**Referenced documents may be obtained at the SEPA Center or the South Puget Sound region office during the SEPA comment period.*

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No.

10. List any government approvals or permits that will be needed for your proposal, if known.

☐ HPA ☐ Burning permit ☐ Shoreline permit ☒ Incidental take permit ☒ FPA ☒ Other: Board of Natural Resources Approval

11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)

a. *Complete proposal description:*

The Puma Timber Sale is a two unit, 117-acre regeneration harvest and associated right of way located within the west block of Tahuya State Forest in Mason County. The primary access roads are the Cougar and Hohobas Way Roads, which are forest roads with their main entrance on the Dewatto Bay County Road. Secondary haul roads for this proposal include the Puma and Panther Roads. This proposal is approximately 15 miles, by road, west of the town of Belfair, Washington. The proposal lies entirely within the Kitsap SW Watershed Administrative Unit (WAU). This management activity is in compliance with the 1997 DNR Habitat Conservation Plan, as well as with the Washington State Forest Practices Laws.

Roughly 81 percent of the Puma harvest units are located on slopes ranging from 5 to 15 percent. The remaining 19 percent is on slopes ranging from 15 to 40 percent. Elevation ranges within the harvest unit from 280 feet along the southwestern portions of Unit 2 to nearly 420 feet along the ridges in the northern portion of Unit 1. Stand composition is predominantly 74 year old Douglas fir, with intermingled western white pine and western hemlock. Site index for Douglas-fir ranges from 84 to 134, with the majority of the unit at 93. Estimated volume for this sale is approximately 2.1 MMBF.

The unit is bounded with white DNR "Timber Sale Boundary" tags and a property line marked with yellow flagging. Leave trees within the units are painted blue at a rate averaging of approximately 9 per acre (totaling 1050 leave trees over 12 inches DBH). Painted leave trees were selected based on creating structural diversity for the next rotation, thus focusing on dominant and co-dominant trees, as well as those trees which exhibit value for various wildlife species (broken tops, snags, etc). In addition, old growth remnants were painted to leave. Some of the marked leave trees may be "hazard trees" as defined by L&I. Hazard trees may be cut to comply with safety regulations. The division geologist and region biologist have evaluated this proposal. No wildlife or floral species of concern are found on site.

Ground based yarding equipment will be used for this harvest. The proposal includes 1,170 feet of required construction and 3,976 feet of optional construction. Approximately 1,440 cubic yards of material may be extracted from the Sandhill Pit, which is located in the NE ¼ NW ¼ of Section 24, T23N, R02W. In addition 1,000 cubic yards of pit run rock may be extracted from the Cougar Pit, which is located immediately north of Unit 1 (NE ¼ SE ¼ of Section 8, T22N, R03W). Approximately 3,976 feet of newly constructed roads will be abandoned (if they are built) prior to the termination of the contract. Abandonment will consist of pulling culverts, installing water bars and placing slash and logging debris on the road surface to deter ORV use. The initial 1,170 feet of the Panther road will remain open to facilitate future forest management activities.

b. *Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.*

This proposal is located on a large flat glacial deposit with wetlands of various sizes adjacent to the northern and eastern boundaries and Type 4 and 5 streams between and to the east of the units which flow into the Rendsland Creek. The majority of the stand is in the sixty to seventy year age class, which originated by natural regeneration following extensive logging and wildfires in the early thirties. The overstory stand in both the units is predominately even-aged Douglas fir, with an occasional old growth remnant. Secondary conifer species in the stand include western white pine, western hemlock, and lodgepole pine. Red alder is the major hardwood species with a lesser component of big leaf maple and pacific madrone. The understory consists primarily of salal and huckleberry with ferns and moss in lower areas.

These Forest Management Units (FMUs) are managed to produce the highest available yield of revenue to the trusts by harvesting and growing timber species that maintain the maximum growth and yield for the site and market. The objective to provide high

value marketable timber is balanced with maintaining a natural diversity of species, wildlife habitat and hydrologic function within the WAU and landscape over time. Guidelines and requirements from the Forestry Handbook, Forest Resource Plan, the Habitat Conservation Plan, and biologists regarding habitat components, hydrologic function and stand structures apply to the Southwest Kitsap WAU and the entire Tahuya State Forest as well as these FMUs.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		5146	2.2	0
Reconstruction		0		0
Abandonment		3976	1.73	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	4 **			

**Includes 2 temporary culverts on Spur 3 **

12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under “SEPA Center.”)

a. Legal description:

T22N R3W S8
T22N R3W S17

b. Distance and direction from nearest town (include road names):
9 miles west of Tahuya

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under “ SEPA Center.”)

WAU Name	WAU Acres	Proposal Acres
KITSAP, SW	63367	117

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website <http://www.dnr.wa.gov> under “SEPA Center” for a broader landscape perspective.)

The proposal consists of two harvest units in the Tahuya State Forest and is located within the SW Kitsap WAU. The information in the tables below was taken from the state GIS data layer. This WAU has not been divided into sub-basins and does not have a completed watershed analysis. Currently, 64 percent of the SW Kitsap WAU is hydrologically mature.

Kitsap SW WAU

WAU/Sub-basin	Total Acres	DNR Acres (percent of total)	Average Annual Harvest Rate (over the last 7 years) on <u>DNR</u> land (percent of DNR)		Non DNR Acres (percent of total)	Average Annual Harvest Rate (over the last 7 years) on <u>Non DNR</u> land (percent of Non DNR total)		Planned Average Annual DNR Harvesting (over the next 6 years) (percent of DNR)	Puma Acres (all even age)
<u>Kitsap SW WAU</u>	63,367	16,248 (25.6%)	323 ac. (1.99 %)		47,119 (74.4%)	2149 ac. (4.6%)		252ac. (1.5%)	117
			Even age	Uneven age		Even age	Uneven age	Even age	
			230ac. (71%)	93 ac. (29%)		973ac. (45%)	1176ac. (55%)	252ac. (100%)	
								0 ac. (0%)	

This sale, combined with past and future planned sales within the WAU, is not expected to contribute to a negative cumulative effect to the environment. Several environmental issues have been mitigated in the current proposal to assure this activity will not contribute to an increased chance of environmental impact. The primary environmental issues identified in this area were water quality, soil disturbance, and wildlife habitat. All wetlands near this proposal have wetland management zones protecting them. One Type 1, two Type 4 and eight Type 5 streams have riparian buffers which exceed the DNR HCP requirements. These buffers will reduce sediment delivery to the streams and preserve water quality.

Sale boundaries were placed on the flat topography away from any unstable incised channels. The slope stability assessment expressed concern that increased ground water recharge from timber harvest could increase the possibility for sediment delivery to typed streams. Historically, harvest activities have taken place on DNR managed lands within this WAU, which have similar features (flat, rolling topography with deeply incised stream channels which have clearly defined slope breaks) to this proposal, no known sediment delivery has occurred to typed waters as a result of timber harvest. Nor has there been any failures associated with harvest on adjacent private where lands where all trees were harvested on the steep slopes and into type 5 streams. Boundaries for this proposal are set back from these breaks in slope. This practice, as well as the riparian and wetland management zones outlined above will minimize the risk of sediment delivery to typed waters.

Wildlife habitat with this proposal is protected in the Riparian Management Zones, Wetland Management Zones and with leave trees. A total of 1050 leave trees have been left to preserve structural diversity for wildlife habitat. This equates to approximately 9 leave trees per acre, or 9.4% of the trees over 12” DBH will be left on site as leave trees. The site will be planted within two years of harvest with Douglas fir.

Other measures have been incorporated into the contract of the proposal to reduce long-lasting impacts to the site. To reduce soil disturbance during harvest, one end of the log will be required to be suspended above the ground during yarding. Roads have been designed to avoid potentially sensitive areas and are located on stable slopes. One existing culvert located on the Puma Road will have its outlet armored with either rip rap or clean stumps. All roads will have adequate drainage structures that comply with all HCP and Forest Practice Rules.

Future activities in these WAUs within the next 2 years include road maintenance, timber harvest and silviculture activities. These activities will continue to follow Forest Practices Rules and the HCP. This will ensure that all components of the environment are adequately protected.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☐ Flat, ☒ Rolling, ☐ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☐ Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The SW Kitsap WAU sits on a large flat glacial deposit located in Kitsap and Mason counties. There are numerous streams throughout the WAU, as well as numerous wetlands of various sizes. There are also many lakes within the WAU ranging from very small to eighty acres plus in size. The streams cut deep channels and drainages as they flow towards the Hood Canal.

The elevation ranges from sea level along Hood Canal to 500 feet. The climate is relatively mild with average rainfall of 45 to 60 inches per year. The temperatures range from a low of 18 degrees at times in the winter to a high of 90 degrees in the summer. The average temperature range is 35 to 75 degrees.

The major timber type is Douglas fir with a lesser component of western hemlock, western red cedar, western white pine, and lodgepole pine. Red alder is the major hardwood species mixed with big leaf maple and Pacific madrona. Understory consists primarily of salal and huckleberry with ferns and grasses and mosses in lower areas.

This WAU experienced extensive wildfires in the early thirties after logging. The age of the timber ranges from two years to 80 plus years with the majority of the ages running in the 50 to 60 year age classes as a result of natural regeneration after the wildfires. Ninety percent of this WAU has slopes in the 0 to 30 percent range, 8 percent in the 31 to 65 percent range, and 2 percent in the 61 percent plus range.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).
The proposal location is fairly typical of other areas in the WAU at the same elevation with similar glacial soil composition and has evidence of groundwater discharge adjacent to the proposal location as a result of the soil type.

b. What is the steepest slope on the site (approximate percent slope)?

A small area (less one acre or 3 percent of the unit) in the southwest corner of Unit 2 contains slopes up to 40%, however no ground based equipment will be allowed to operate on slopes over 35%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. *Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.*

State Soil Survey #	Soil Texture or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
7331	GRAVELLY SANDY LOAM	5-15	97	INSIGNIFICANT	LOW
7332	GRAVELLY SANDY LOAM	15-40	19	INSIGNIFICANT	LOW
1728	GRAVELLY SANDY LOAM	45-70	1	HIGH	HIGH

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

1) Surface indications:

Both units have features of instability that are adjacent to the proposal boundaries. Areas of potential instability have been excluded from this proposal.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There is no data available for the sub-basin. Within the WAU, both shallow and deep-seated failures have occurred. These failures are generally associated with steep, incised stream channels in combination with gravelly soils. Extreme caution was used in excluding these features, as well as areas that have potential to become such failures.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐ No ☒ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Associated management activity:

There is no data available for the sub-basin. For the WAU, there have been shallow failures associated with past timber harvest and road construction. These failures were primarily caused by poor road locations, inadequate engineering/design of the roads and lack of road maintenance. The District Engineer has inspected the existing

and proposed roads and found none that are located on steep or unstable slopes in this proposal. No known deep seated failures have occurred due to timber harvest or associated road activity.

- 4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*
☒No ☐Yes, describe similarities between the conditions and activities on these sites:
- 5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*

All streams and wetlands were buffered according to HCP requirements or exceeded HCP requirements to protect potentially unstable slopes and water quality. Boundaries are located on gentle topography above slope breaks to protect potentially unstable slopes. Historical DNR harvests in areas similar to this proposal have exhibited no increased slope instability or sediment delivery to typed waters. In addition, neighboring private forest landowners who have conducted harvest activities have located boundaries below the breaks in slope in the incised stream drainages with no known harvest related sediment delivery. Since slopes found within this proposal are mostly less than 35%, a ground-based operation is the most economical and efficient manner to complete this project. The roads designed for this proposal are located on stable, well-drained soils. No harvest will occur on unstable slopes and no equipment will be allowed to operate on slopes exceeding 35%. Soils exposed from road construction will be grass seeded. Cross drains and ditches will be periodically checked and cleaned as necessary to maintain flow.

Although a portion of the harvest area is described as in the recharge area for surrounding streams, no additional mitigation measures, beyond the RMZs, WMZs, leave tree strategy within the units and other mitigation described above, were determined as necessary after considering discussions with geologists, DNR hydrologist Jim Ryan and observations of past harvests in the area as described above.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
*Approx. acreage new roads: ** 2.2 ** Approx. acreage new landings: 1.2 Fill source: None.*
- ** 1.73 acres will be rehabilitated after the completion of this activity- the road surface will be ripped, slash and stumps placed to deter ORV traffic, and all exposed soil will be grass seeded.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
- Yes. There is potential for an incidental amount of erosion to occur, but with control measures such as proper culvert installation and regular maintenance, delivery of sediment to streams and wetlands will be minimal. Riparian Management Zones, Wetland Management Zones and the placement of culverts to drain water onto the forest floor will reduce the possibility for eroded material from entering typed waters.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
- Up to 2.2 acres of new road may be constructed during this proposal, and approximately 1.73 acres will be abandoned after use. The remainder will serve as forest access for future management activities. All roads equate to less than 2 percent of the entire proposal area- the majority of the roads involved with this proposal are existing.
- h. Propose measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
- Roads will be constructed and re-constructed during the dry season. Erosion will be controlled during construction and re-construction with erosion control devices such as straw bales and silt fencing if necessary. Yarding and hauling will be restricted during wet weather if excessive rutting occurs in the opinion of the contract administrator.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
- Incidental amounts of exhaust produced by harvest equipment or dust created by the movement of the same equipment.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
- No.
- c. Proposed measures to reduce or control emissions or other impacts to air, if any:
- None.

3. Water

- a. Surface:
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See timber sale map and forest practice base maps.)*
- a) *Downstream water bodies:*
- Rendsland Creek, as well as several un-named streams, flow southward to the Hood Canal from the proposal area.

b) Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in Feet (per side for streams)
wetlands	B	4	100
stream	1	1	800
stream	4	2	100
stream	5	8	50

c) List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

Buffers on all streams and wetlands adjacent to the timber sale (shown on the timber sale map) meet or exceed the requirements of the DNR Habitat Conservation Plan (DNR HCP). The harvest boundary was placed 800 feet from the Type 1 (Rendsland Creek) to add protection by reducing area of harvest in the recharge area for the stream and by increasing the distance around the drainages that show a history of shallow debris flows.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.

☐No ☒Yes (See RMZ/WMZ table above and timber sale map.)

Description (include culverts):

Harvest activities will occur between the distances listed for RMZs from streams in the above table and 200 feet. All activities associated with this proposal are in compliance with or exceed the DNR HCP and State Forest Practices Rules. Four culvert will be installed for drainage purposes as construction progresses. Two will be installed on Spur 3 and will be removed as the road is abandoned. Two cross drains will be placed at the junction of the Puma road and will be permanent. One existing culvert outlet will be armored with rip rap or clean stumps in order to fix a current sedimentation issue.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)

☒No ☐Yes, description:

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

☒No ☐Yes, describe location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

☒No ☐Yes, type and volume:

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?

There is no data for the sub-basin. These WAUs contain a small percentage of terrain that is highly susceptible to erosion, some near streams.

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?

☐No ☒Yes, describe changes and possible causes:

Some streams within these WAUs have experienced accelerated aggradations. In general, the stream systems currently contain excess fine sediments. This has occurred primarily from natural storm events. There is no evidence of stream aggradation within the sale area.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?

☐No ☒Yes, explain:

See geologist memo, dated 6/21/04 and related email dated 8/31/04 by Wendy Gerstel. A portion of the harvest area is described as in the recharge area for surrounding streams with evidence of groundwater discharge into adjacent drainages. Following discussions with geologists, DNR hydrologist Jim Ryan and observations of past harvests in the area that haven't experienced harvest-related sediment delivery even with less conservative harvest designs, it was considered that this proposal, as it is currently designed, is forseen as not having a significant increase in hydrologic processes that may contribute to sediment delivery to streams.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?

The DNR averages approximately 3.7 miles of road per square mile in the Kitsap SW WAU.

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?

☒No ☐Yes, describe:

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.

☒No ☐Yes, approximate percent of WAU in significant ROS zone.

Approximate percent of sub-basin(s):

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?

- 13) *Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?*

☐ No ☒ Yes, describe observations:

Streams within this WAU have experienced accelerated aggradations. In general, the stream systems currently contain excess fine sediments. This has occurred primarily from natural storm events. There is no evidence of stream aggradation within this proposal area.

- 14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*

The current proposal with mitigation measures for erosion and stream and wetland protection, along with landscape level practices to maintain mature forest components should not significantly increase water runoff beyond historical levels.

- 15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*

☒ No ☐ Yes, possible impacts:

- 16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*

Some minor runoff may occur from roads during peak flow, but cross drain culverts have been designed and installed to direct ditchwater onto the forest floor prior to entering surface water where possible. Annual maintenance inspections and maintenance will prevent any major failures.

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Insignificant amounts of oil and other lubricants may be discharged inadvertently as a result of heavy equipment use. No oils or lubricants will be disposed of on site.

- 3) *Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*

☒ No ☐ Yes, describe:

a) Note protection measures, if any.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Storm water runoff will be collected by ditches and diverted through cross drain culverts onto the forest floor where possible. Culverts or out-sloping will be placed to minimize the amount of ditch water directly entering existing stream channels. Minor amounts of ditch water may flow directly into Type 5 streams.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

Insignificant amounts of oil and other lubricants may be discharged inadvertently as a result of heavy equipment use.

a) Note protection measures, if any.

The wetland and riparian management zones will reduce the possibility of waste materials entering surface waters. No lubricants or containers will be disposed of on site.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

- a. Check or circle types of vegetation found on the site:
- ☒deciduous tree: ☒alder, ☐maple, ☐aspen, ☐cottonwood, ☐western larch, ☐birch, ☐other:
☒evergreen tree: ☒Douglas fir, ☐grand fir, ☐Pacific silver fir, ☐ponderosa pine, ☒lodgepole pine,
☐western hemlock, ☐mountain hemlock, ☐Englemann spruce, ☐Sitka spruce,
☐red cedar, ☐yellow cedar, ☒other: western white pine
☒shrubs: ☒huckleberry, ☐salmonberry, ☒salal, ☐other:
☐grass
☐pasture
☐crop or grain
☐wet soil plants: ☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☐devil's club, ☐other:
☐water plants: ☐water lily, ☐eelgrass, ☐milfoil, ☐other:
☐other types of vegetation:
☐plant communities of concern:
- b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)
- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")
- Unit 1:
- North: 25 year-old DNR plantation,
East: 60+ year old DNR timber,
South: 60+ year-old DNR timber,
West: 25 year-old DNR plantation,
+/- 5 year-old private plantation,
- Unit 2:
- North: 60+ year-old DNR timber,
East: 60+ year-old DNR timber,
South: 60+ year-old DNR timber,
West: 25 year-old DNR plantation,
- 2) Retention tree plan:
- All units have very few snags. Leave trees are in clumps marked with blue paint at a rate of 9 trees per acre (which is 9.4% of the stand over 12 inches DBH). Residual old growth Douglas fir within the units (approximately 67) are selected as leave trees. The other leave trees are vigorous second growth Douglas fir and western white pine.

- c. List threatened or endangered plant species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

A review of P&T special concerns report and the Natural Heritage Data base along with site visits found no sensitive plant species.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
- Within two years following harvest, hand-planting Douglas fir will re-establish Douglas fir plantations in units.

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:
- birds: ☐hawk, ☐heron, ☐eagle, ☒songbirds, ☐pigeon, ☐other:
mammals: ☒deer, ☒bear, ☐elk, ☐beaver, ☐other:
fish: ☐bass, ☐salmon, ☐trout, ☐herring, ☐shellfish, ☐other:
unique habitats: ☐talus slopes, ☐caves, ☐cliffs, ☐oak woodlands, ☐balds, ☐mineral springs
- b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found in Database Search				

- c. Is the site part of a migration route? If so, explain.
☒Pacific flyway ☐Other migration route: Explain if any boxes checked:

All of Western Washington is in the Pacific Flyway.
- d. Proposed measures to preserve or enhance wildlife, if any:

- 1) *Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.*

This proposed sale conforms to all regulations under the 1997 DNR Habitat Conservation Plan (HCP). The HCP includes a number of strategies to enhance and preserve wildlife over time. Specific to this proposal is the riparian strategy (to conserve and protect habitat for species that are dependent on aquatic and riparian habitat), and quality leave tree retention (which may provide critical elements for upland species and preserve long term site productivity through the maintenance of forest processes). Leave trees are wind firm and well-formed dominant and co-dominant trees representing the current diversity of species as well as remnant old growth.

Included in trees selected to leave are individual species and tree types known to have high wildlife use have been retained. Trees with unique characteristics (such as forked or damaged tops) will be retained throughout the sale to provide current and future habitat for a variety of wildlife species including woodpeckers, sapsuckers, and cavity dwellers. Some of the marked leave trees may be "hazard trees" as defined by L&I. Hazard trees may be cut to comply with safety regulations. In the case of this occurring, the tree will be left as downed wood.

6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal health hazard due to operation heavy equipment and the minor spillage of fuel and lubrication oils are always present with this type of operation. The risk of forest fire is always present and will be increased for about two years following harvest due to logging slash.

- 1) Describe special emergency services that might be required.

The Department of Natural Resources, private and fire protection district fire suppression resources. Emergency medical or air ambulance for personnel injuries. Hazardous material spills may require Department of Ecology and/or county assistance.

- 2) Proposed measures to reduce or control environmental health hazards, if any:

Fire equipment will be required on site during closed fire season.
Operations will cease if relative humidity falls below 30%.

- b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Logging, road construction and maintenance and forest products hauling operations will create increased noise during the operating season. None of this is an increase above normal historical use.

- 3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties? (*Site includes the complete proposal, e.g. rock pits and access roads.*)

Timber production/forest management (forestry).

- b. Has the site been used for agriculture? If so, describe.

No.

- c. Describe any structures on the site.

Does not apply.

- d. Will any structures be demolished? If so, what?
Does not apply.
- e. What is the current zoning classification of the site?
Mason County has no zoning.
- f. What is the current comprehensive plan designation of the site?
Long-term commercial forestry.
- g. If applicable, what is the current shoreline master program designation of the site?
Does not apply.
- h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.
No.
- i. Approximately how many people would reside or work in the completed project?
Does not apply.
- j. Approximately how many people would the completed project displace?
None.
- k. Proposed measures to avoid or reduce displacement impacts, if any:
None.
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
This proposal is compatible with surrounding land uses and with the comprehensive plan.

9. **Housing**

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
Not applicable.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
Not applicable.
- c. Proposed measures to reduce or control housing impacts, if any:
None.

10. **Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle exterior building material(s) proposed?
Does not apply.
- b. What views in the immediate vicinity would be altered or obstructed?

Approximately 117 acres of 60+ year old timber will be replaced with a forest plantation. The units in this proposal are not visible from any residential properties, but will be visible from the surrounding forest roads and ORV trails.
 - 1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
☒No ☐Yes, viewing location:
 - 2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
☒No ☐Yes, scenic corridor name:
 - 3) *How will this proposal affect any views described in 1) or 2) above?*
 Not applicable.
- c. Proposed measures to reduce or control aesthetic impacts, if any:
None.

11. **Light and Glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
Does not apply.
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
Does not apply.

- c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

- d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Non-motorized recreation is allowed in the West Block of the Tahuya State Forest, but this area receives little recreational activity.

- b. Would the proposed project displace any existing recreational uses? If so, describe:

No,

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Does not apply.

13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None are shown on the Forest Management Planning and Tracking System Special Concerns Report. None found on site.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

Forest Management Planning and Tracking System Special Concerns Report does not indicate any such issues. None found on site.

- c. Proposed measures to reduce or control impacts, if any:

(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

Does not apply.

14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Haul routes will utilize state forest roads before connecting with the Dewatto Bay County Road. See vicinity map.

- 1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*

No.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. The nearest transit stop is approximately 15 miles away in Belfair.

- c. How many parking spaces would the completed project have? How many would the project eliminate?

None.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

All road work will occur on state managed lands. 5,146 feet of road may be constructed for use during this proposal. If constructed, 3,976 feet will be abandoned upon completion of harvest. In addition, see A.11.c. above

- 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*

There will be short-term increase in traffic during the operation period for this proposal due to forest products and equipment hauling. The established forest roads and constructed roads under this proposal will not affect the overall transportation system to the public since these roads are closed to public use.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Peak traffic volumes may occur during the summer months. Up to 12 log truck trips per day could be possible. No log truck traffic after the sale is complete.

- g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Wildfire would need response from the Department of Natural Resources and Mason County Fire Department.
- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

None.
- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does not apply.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: Joseph Brady, Operations Forester, Tahuya and Green Mountain State Forests Date: 7/28/04
Title

Completed by: Herb Cargill, Operations Manager Date: 9/13/04
Title

Completed by: _____ Date: _____
Eric Shroff, South Puget Sound Region Manager